

Product datasheet for RC210513

MYO1E (NM_004998) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO1E (NM_004998) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYO1E
Synonyms:	FSGS6; HuncM-IC; MYO1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210513 representing NM_004998 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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AGTCATGAGCACTTCAACAGTTGGAACCAAGGCTTCATCATTATCATTATGCTGGGAAGGTATCCTATG
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Protein Sequence:

>RC210513 representing NM_004998
 Red=Cloning site Green=Tags(s)

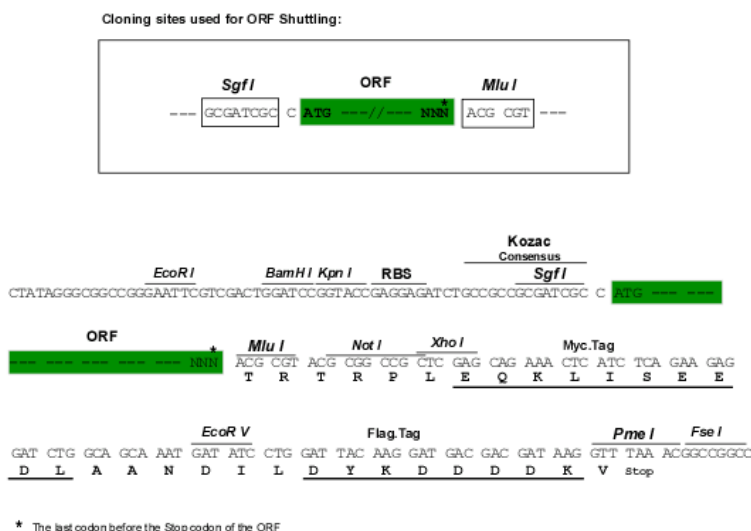
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3174_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004998

ORF Size: 3324 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004998.4](#)

RefSeq Size: 4729 bp

RefSeq ORF: 3327 bp

Locus ID: 4643

UniProt ID: [Q12965](#)

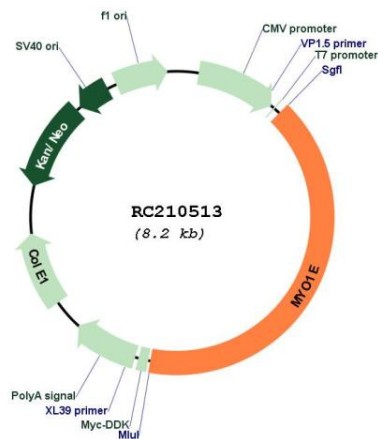
Cytogenetics: 15q22.2

Domains: IQ, SH3, myosin_head

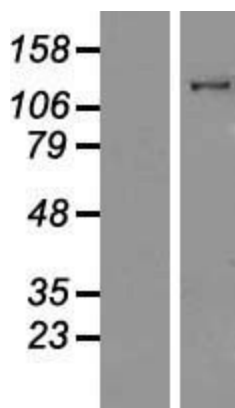
MW: 126.9 kDa

Gene Summary: This gene encodes a member of the nonmuscle class I myosins which are a subgroup of the unconventional myosin protein family. The unconventional myosin proteins function as actin-based molecular motors. Class I myosins are characterized by a head (motor) domain, a regulatory domain and a either a short or long tail domain. Among the class I myosins, this protein is distinguished by a long tail domain that is involved in crosslinking actin filaments. This protein localizes to the cytoplasm and may be involved in intracellular movement and membrane trafficking. Mutations in this gene are the cause of focal segmental glomerulosclerosis-6. This gene has been referred to as myosin IC in the literature but is distinct from the myosin IC gene located on chromosome 17. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RC210513



Western blot validation of overexpression lysate (Cat# [LY417600]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210513 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).